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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/575,456	05/22/2000	James S. Cullum	M4065.0244/P244	2124

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EXAMINER

TRUJILLO, JAMES K

ART UNIT	PAPER NUMBER
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2116

DATE MAILED: 02/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/575,456

Applicant(s)

CULLUM ET AL.

Examiner

James K. Trujillo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6,10-13,15,16,18-20,24-27,29,30,32-34,38-47 and 49-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-6, 10-13, 15-16, 18-20, 24-27, 29-30, 32-34, 38-47 and 49-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

1. It is hereby acknowledged that the following papers have been received and placed of record in the file: Amendment B dated 12/01/03.
2. Claims 1-2, 4-6, 10-13, 15-16, 18-20, 24-27, 29-30, 32-34, 38-47 and 49-51 are presented for examination.

Response to Arguments

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-2, 4-6, 10-13, 15-16, 18-20, 24-27, 29-34, 38-47 and 49-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art (hereinafter AAPA) in view of Ashuri U.S. Patent 5,652,530 (hereinafter Ashuri).
5. The rejections are respectfully maintained and incorporated by reference as set forth in the last office action.
6. Applicant's arguments filed 12/1/03 have been fully considered but they are not persuasive.
7. In the remarks, applicants argued in substance that (1) neither AAPA nor Ashuri, nor the combination of both, teaches or suggest incorporating a plurality of adjustable delay circuits receiving the first clock signal where each of the adjustable delay circuits provides a respective delayed first clock signal to a respective one of a plurality of output circuits and (2) that "...Ashuri adds nothing to AAPA and is cumulative of AAPA[.]" and that the "...combination is nothing more than a portion of AAPA disclosed in Fig. 1..." of the instant application in

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particular arguing that "...AAPA discloses a single output circuit 13n having a delay shifter 19...".

8. As to (1), in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, the difference between AAPA and the claimed invention is that AAPA has only a single delay for a clock signal associated with a plurality of data output circuits while in the claimed invention each data output circuit has its own associated delay for a clock signal. Ashuri teaches that each data output apparatus should have its own adjustable delay (delay shifter 310) incorporated to its clock signal [figure 3 and corresponding text and col. 1 lines 16-60]. The adjustable delay of Ashuri is a collection fuse elements, as depicted in figure 5, and corresponding text. Ashuri teaches an integrated output circuit having its own adjustable delay at a clock input to ensure that the clock is delayed by an appropriate amount for the output circuit. As set forth in the last Office Action it would have been obvious to one of ordinary skill in the art to modify AAPA by applying the teachings of Ashuri to desirably ensure that each output circuit has an appropriate amount of delay for the clock signal. To better illustrate the modification of AAPA in the last Office Action, one of ordinary skill would simply substitute the output circuit (integrated circuit having its own adjustable delay depicted in figure 3) of Ashuri for the output circuits (13a-13n) in AAPA. One of ordinary skill in the art would readily

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recognize that the single delay of AAPA (depicted as 19 in figure 1 of the instant application) would no longer be necessary because such delay is accounted for in each of the integrated output circuits as taught by Ashuri. Each output circuit (taught by Ashuri) would now have its own adjustable delay in the clock signal. This modification results in the claimed invention.

9. As to (2), Ashuri cannot be cumulative (assuming definition is 1: made up of accumulated parts, or 2: increasing by successive addition) of AAPA because in Ashuri each output has an associated delay. If that were the case, Ashuri would not have the delay shifter integrated on the same circuit as the single output flip-flop 350 [figure 3 and col. 3 lines 9-10]. AAPA shows an output circuit 13n connected to a delay shifter 19. The delay shifter 19 of AAPA is also associated with output circuits 13a-13n-1. That is, one delay for many outputs. This is not the case for Ashuri. Ashuri has a one-to-one correspondence of delay shifter to output shifter. That is, for each output circuit of Ashuri there must be a corresponding delay shifter, which is not provided for by AAPA.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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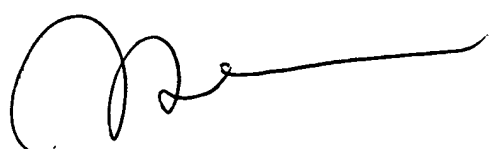
CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James K. Trujillo whose telephone number is (703) 308-6291. The examiner can normally be reached on M-F (7:30 am - 5:00 pm) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on (703) 305-9717. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

James Trujillo
January 29, 2004



THOMAS LEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100